

## LABORATORY CONTROL SAMPLE REPORT

Sample ID: LCSOUK11ICS0

Batch ID UK11ICS0

Element Name	True Value	Result	Units	Recovery(%)	Flag	Limits (mg/kgdrywt)	File
ANTIMONY	0.500	49.4	mg/kgdrywt	98.8%		39.8 60.2	AUK12A
ARSENIC	0.500	51.2	mg/kgdrywt	102.4%		39.8 60.2	AUK12A
BARIUM	2.00	190.	mg/kgdrywt	95.0%		159 241	AUK12A
BERYLLIUM	0.0500	4.96	mg/kgdrywt	99.2%		3.98 6.02	AUK12A
BORON	0.500	50.3	mg/kgdrywt	100.6%		39.8 60.2	AUK12A
CADMIUM	0.250	25.6	mg/kgdrywt	102.4%		19.9 30.1	AUK12A
CALCIUM	2.50	253.	mg/kgdrywt	101.2%		199 301	AUK12A
CHROMIUM	0.200	20.0	mg/kgdrywt	100.0%		15.9 24.1	AUK12A
COBALT	0.500	51.4	mg/kgdrywt	102.8%		39.8 60.2	AUK12A
COPPER	0.250	23.0	mg/kgdrywt	92.0%		199 30.1	AUK12A
IRON	1.00	100.	mg/kgdrywt	100.0%		79.5 120	AUK12A
LEAD	0.500	51.4	mg/kgdrywt	102.8%		39.8 60.2	AUK12A
MAGNESIUM	5.00	533.	mg/kgdrywt	106.6%		398 602	AUK12A
MANGANESE	0.500	48.1	mg/kgdrywt	96.2%		39.8 60.2	AUK12A
MOLYBDENUM	0.300	31.0	mg/kgdrywt	103.3%		23.8 36.1	AUK12A
NICKEL	0.500	52.5	mg/kgdrywt	105.0%		39.8 60.2	AUK12A
SELENIUM	0.500	50.2	mg/kgdrywt	100.4%		39.8 60.2	AUK12A
SILVER	0.0500	4.76	mg/kgdrywt	95.2%		3.98 6.02	AUK12A
STRONTIUM	0.500	46.9	mg/kgdrywt	93.8%		39.8 60.2	AUK12A
THALLIUM	0.500	50.8	mg/kgdrywt	101.6%		39.8 60.2	AUK12A
TIN	0.500	54.5	mg/kgdrywt	109.0%		39.8 60.2	AUK12A
TITANIUM	1.00	103.	mg/kgdrywt	103.0%		79.5 120	AUK12A
VANADIUM	0.500	47.1	mg/kgdrywt	94.2%		39.8 60.2	AUK12A
ZINC	0.500	52.1	mg/kgdrywt	104.2%		39.8 60.2	AUK12A

VIL\_RESP00890

H Laboratory control sample recovery is greater than the laboratory's acceptance limit.

L Laboratory control sample recovery is less than the laboratory's acceptance limit.

Quality Control Report  
Blank Sample Summary Report

**Total Solids**

<u>Samp Type</u>	<u>QC Batch</u>	<u>Anal. Method</u>	<u>Anal. Date</u>	<u>Prep. Date</u>	<u>Result</u>	<u>PQL</u>
MBLANK	WG11890	CLP SOW 788	11-NOV-04	10-NOV-04	U 0.10 %	.1 %

VIL\_RESP00891

**Quality Control Report**  
**Laboratory Control Sample Summary Report**

***Total Solids***

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG11890-2	LCS	WG11890	11-NOV-04	10-NOV-04	%	90	90.	100	80-120	

**VIL\_RESP00892**

## SAMPLE RECEIPT CONDITION REPORT

Tel. (207) 874-2400

Fax (207) 775-4029

CLIENT:

Ransom Env.

PROJECT:

LAB (WORK ORDER) # 2004-1101PAGE: 1 OF 1COOLER: 1 OF 1

COC# \_\_\_\_\_

SDG# \_\_\_\_\_

DATE / TIME RECEIVED: 11/8/04 1640DELIVERED BY: ClientRECEIVED BY: D. WadeLIMS ENTRY BY: AWLIMS REVIEW BY / PM: AW

	YES	NO	EXCEPTIONS	COMMENTS	RESOLUTION
1. CUSTODY SEALS PRESENT / INTACT?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2. CHAIN OF CUSTODY PRESENT IN THIS COOLER?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3. CHAIN OF CUSTODY SIGNED BY CLIENT?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4. CHAIN OF CUSTODY MATCHES SAMPLES?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5. TEMPERATURE BLANKS PRESENT?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP BLANK TEMP (°C)= _____	
6. SAMPLES RECEIVED AT 4°C +/- 2°?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	COOLER TEMP (°C)= <u>1.8</u> NA	
7. ICE / ICE PACKS PRESENT <u>Y</u> or N?				(RECORD COOLER TEMP ONLY IF TEMP BLANK IS NOT PRESENT)	
8. VOLATILES FREE OF HEADSPACE?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
9. TRIP BLANK PRESENT IN THIS COOLER	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
10. PROPER SAMPLE CONTAINERS AND VOLUME?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
11. SAMPLES WITHIN HOLD TIME UPON RECEIPT?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
12. SAMPLES PROPERLY PRESERVED <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
13. CORRECTIVE ACTION REPORT FILED?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A		
14. ANALYTICAL PROGRAMS (CIRCLE ONE)	COMMERCIAL <u>CLP</u> HAZWRAP NFESC ACOE AFCEE OTHER (STATE OF ORIGIN): _____				

LOG - NOTES<sup>(1)</sup>:

Use this space (and additional sheets if necessary) to document samples that are received broken or compromised, C-O-C discrepancies, radiation checks, residual chlorine check, results of pH check, if required. If samples required pH adjustment, record volume and type of preservative added.

340 County Road No. 5  
P.O. Box 720  
Westbrook, ME 04092  
Tel: (207) 874-2400  
Fax: (207) 775-4029

## CHAIN of CUSTODY

**PLEASE BEAR DOWN AND  
PRINT LEGIBLY IN PEN**

Page \_\_\_\_ of \_\_\_\_

Client	Contact	Phone #	Fax #
Angon Environmental	Aaron Martin	(207) 772-2891	( )
Address	City	State	Zip Code
200 High St.	Portland	ME	04101
Purchase Order #	Proj. Name / No.	Katahdin Quote #	
	046016		

iii (if different than above)	Address
-------------------------------	---------

amplifier (Print / Sign) <i>Aaron Martin / Aaron Martin</i>	Copies To:
---	------------

[illegible]

EMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT

IRBILL NO: \_\_\_\_\_

EMP°C \_\_\_\_\_ ☐ TEMP BLANK    ☐ INTACT    ☐ NOT INTACT

[illegible]

COMMENTS

Analysis - Arsonic Only					
Relinquished By: (Signature) <i>[Signature]</i>	Date / Time 11/04 16:40	Received By: (Signature) <i>[Signature]</i>	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)



Katahdin Analytical Services  
Login Chain of Custody Report (Ino1)  
Nov. 10, 2004  
08:04 AM

Page: 1 of 1

Login Number: WU4159

Account: RANSOM001

NoWeb

Ransom Environmental

Project:

Primary Report Address:

Aaron Martin  
Ransom Environmental  
200 High St.

Portland, ME 04101

Primary Invoice Address:

Accounts Payable  
Ransom Environmental  
Brown's Wharf

Newburyport, MA 01950

Login Information

ANALYSIS INSTRUCTIONS :  
CHECK NO. :  
CLIENT PO# :  
COOLER TEMPERATURE : 1.8  
DELIVERY SERVICES : CLIENT  
EDD FORMAT :  
MAIL DATE :  
PM : AJC  
PROJECT NAME : 046016  
QC LEVEL : II  
REGULATORY LIST :  
REPORT INSTRUCTIONS :  
SDG ID :  
SDG STATUS :

Report CC Addresses:

Invoice CC Addresses:

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	Verbal PR Date	Due Date	Comments
WU4159-1	SS1	08-NOV-04 14:45	08-NOV-04		19-NOV-04	
Matrix	Product	Hold Date (shortest)	Bottle Type	Bottle Count		
Solid	S SW3050-PREP	07-MAY-05				
Solid	S SW6010-ARSENIC	07-MAY-05	50 g Glass			
Solid	S TS	08-DEC-04		1		
WU4159-2	SS2	08-NOV-04 15:15	08-NOV-04		19-NOV-04	
Matrix	Product	Hold Date (shortest)	Bottle Type	Bottle Count		
Solid	S SW3050-PREP	07-MAY-05				
Solid	S SW6010-ARSENIC	07-MAY-05	50 g Glass			
Solid	S TS	08-DEC-04		1		
WU4159-3	SS3	08-NOV-04 15:45	08-NOV-04		19-NOV-04	
Matrix	Product	Hold Date (shortest)	Bottle Type	Bottle Count		
Solid	S SW3050-PREP	07-MAY-05				
Solid	S SW6010-ARSENIC	07-MAY-05	50 g Glass			
Solid	S TS	08-DEC-04		1		

Total Samples: 3

Total Analyses: 9

VIL\_RESP00895

ADDENDUM  
ORIGINAL CHAIN OF CUSTODY

VIL\_RESP00896





Geotechnical  
Environmental  
Water Resources  
Ecological

April 28, 2010  
Project No. 101220

Ms. Kimberly N. Tisa  
United States Environmental Protection Agency  
1 Congress Street, Suite 1100 - CPT  
Boston, MA 02114-2023

Dear Ms. Tisa:

**Re: Proposed Modifications to Self-Implementing PCB Cleanup Plan  
Keddy Mill PCB Cleanup  
Windham, Maine**

As you are aware, a Self-Implementing PCB cleanup plan was submitted to the United States Environmental Protection Agency (EPA) by Village at Little Falls, LLC (VLF) on April 28, 2006 and was approved on June 20, 2006. The plan included three phases of work: removal of PCB-containing soil and debris from building floors; assessment and remediation of PCB-impacted concrete; and assessment and remediation of exterior PCB-impacted soils. Phase I of this plan, removal of PCB-containing soil and debris from building floors, was to have been implemented during the late summer and fall of 2006.

Proposed site redevelopment originally included demolition of the former mill building. However, during the engineering design phase of the redevelopment, building demolition was complicated by the presence of retaining structures abutting the Presumpscot River. As a result, site work was put on hold and the development was redesigned including structural assessment, architectural design and planning with the Town of Windham. Given the uncertainty surrounding the future development of the site and initiatives to secure funding for PCB characterization and cleanup, the PCB cleanup was delayed.

The Town of Windham received an EPA Brownfields Assessment grant in 2009 and had targeted the Keddy Mill for PCB assessment activity. In response to questions raised about the nature and scope of site assessment and cleanup work, Frank Gardner with EPA Region 1 visited the site during the week of April 5, 2010. Following this visit, Mr. Gardner raised concerns about trespassers on the property and requested acceleration of Phase I of the PCB cleanup plan.

GEI Consultants is proposing two modifications to the Phase I PCB cleanup plan approved by EPA (attached hereto) to enhance risk mitigation. The modifications include:

1. Temporarily capping exposed soils inside the mill building which may contain PCBs. Soils are exposed where concrete is missing due to decay or removal for site operations. Exposed soils potentially containing PCBs will be covered with polyethylene and depressions filled with pea stone to match the surrounding floor grade.

**VIL\_RESP00898**

2. Capping the ends of oil-filled fuel supply piping found to contain PCBs. Heavy fuel oil from the pipes was observed to have leaked onto walls and floors in some building areas. Removal of the piping will be undertaken as a future phase of cleanup which is anticipated to address PCB-impacted concrete and may occur in concert with building demolition.

We are submitting this request for plan modification in accordance with condition 14 of the EPA Approval letter dated June 20, 2006. This condition requires notification of any modifications to EPA "no less than 14 calendar days prior to the proposed implementation of the change."

Thank you for your consideration of this plan modification request. If you have any questions, please do not hesitate to contact the undersigned.

Sincerely,

GEI CONSULTANTS, INC.



D. Todd Coffin, C.G., P.G.  
Senior Project Manager

DTC/bdp

Attachment: Phase I PCB Cleanup Plan

cc: **Steve Etzel, Hudson Realty Capital**  
Frank Gardner, EPA Region 1  
Laura Gay, Maine DEP

Y:\PROJECTS\2010\101220 Keddy Mill\tisa 042810.docx

VIL\_RESP00899

**PLAN FOR  
SELF-IMPLEMENTING CLEANUP OF  
PCB REMEDIATION WASTE – PHASE I  
7 DEPOT STREET  
SOUTH WINDHAM, MAINE**

**Prepared for:**

**Renee Lewis  
Village at Little Falls, LLC  
2 Market Street, 6<sup>th</sup> Floor  
Portland, Maine 04101**

**Prepared by:**

**Ransom Environmental Consultants, Inc.  
400 Commercial Street, Suite 404  
Portland, Maine 04101  
(207) 772-2891**

**Project No. 046016  
April 28, 2006**

---

**D. Todd Coffin  
Maine Certified Geologist No. 310**

**VIL\_RESP00900**

## TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION.....</b>	<b>1</b>
<b>2.0</b>	<b>BACKGROUND.....</b>	<b>3</b>
2.1	Site Description .....	3
2.2	Summary of Previous Investigation Activities.....	3
<b>3.0</b>	<b>SITE CHARACTERIZATION BY RANSOM.....</b>	<b>6</b>
3.1	Surface Wipe Samples.....	6
3.2	Bulk Solids on Walls and Floors .....	6
3.3	Oily Material .....	7
3.4	Sub-Slab Sample .....	7
3.5	Bulk Wood Samples .....	7
3.6	Data Usability/Validation .....	7
3.7	Determination of PCB Remediation Waste .....	8
3.8	Quantity of PCB Remediation Waste .....	8
<b>4.0</b>	<b>CLEANUP PLAN.....</b>	<b>9</b>
4.1	Objective .....	9
4.2	Cleanup Goal.....	9
4.3	Public Notification.....	9
4.4	Necessary Permits.....	9
4.5	Sludge, dirt/debris and Oily Material Removal .....	9
4.6	Confirmatory Sampling and Cleanup Verification .....	9
4.7	Contingencies .....	10
<b>5.0</b>	<b>PROPOSED IMPLEMENTATION SCHEDULE .....</b>	<b>11</b>

## TABLES

Table 1: Summary of PCB Analytical Results

## FIGURES

Figure 1: Site Location Map  
Figure 2: Site Plan: Ground Level  
Figure 3: Site Plan: First and Second Floors

## APPENDICES

Appendix A: Certification  
Appendix B: Laboratory Data Sheets  
Appendix C: Notification to MDEP and Town of Windham

## 1.0 INTRODUCTION

On behalf of Village at Little Falls, LLC, Ransom Environmental Consultants, Inc. (Ransom) has prepared this notification for self-implementation of Polychlorinated Biphenyl (PCB) Remediation Waste identified at the former Keddy Mill, located at 7 Depot Street in South Windham, Maine (the Site). PCB Remediation Waste has been identified both inside the Site Building and at the exterior of the Site. Ms. Renee Lewis, representative of Village at Little Falls, LLC, is authorized to signed the certification statement required by §761.61(a)(3)(E). Her contact information is:

Ms. Renee Lewis  
2 Market Street, 6<sup>th</sup> Floor  
Portland, Maine 04101

(207) 772-7219

The certification statement is attached as Appendix A. A Site Location Map is attached as Figure 1.

Based on the characterization activities performed at the Site, Ransom determined that interior building surfaces and soils beneath and exterior to the building are PCB-contaminated. The source of the PCBs identified at portions of the interior of the Site Building originated from:

1. Release(s) of PCB-mineral oil dielectric fluid (PCB-MODF) from electrical equipment located within the mill building;
2. Tracking of PCB-MODF onto surfaces in parts of the Site Building where PCB-MODF oil spills had not necessarily occurred; and
3. PCB-contaminated fuel oil that remains in distribution piping inside the mill building, and in some areas has leaked onto floors and walls from this piping.

PCB-contaminated soils were identified in three areas:

1. In, and adjacent to, a sump located in the basement of the former Melt Building;
2. On the ground floor of the Melt Building where broken concrete flooring has exposed sub-grade soils; and
3. On the ground floor of the Storage and Manufacturing portion of the building where broken concrete flooring has exposed sub-grade soils.

Village at Little Falls, LLC intends to remediate PCB-contaminated concrete floors and walls such that PCB concentrations remaining in concrete and other porous materials are reduced to 1 milligram/kilogram (mg/kg) or less. PCB-contaminated soil beneath and exterior to the Site building will be remediated in accordance with 40 CFR 761.61, and appropriate classification of "Low Occupancy" or "High Occupancy" areas.

PCB clean-up at the Site will be undertaken in three phases, each in accordance with the (United States Environmental Protection Agency's (EPA's) self-implementing procedure under §761.61(a):

### Phase I – Building Interior Sludge, Dirt/debris and Oily Materials

The initial phase of PCB mitigation involves clean-up of sludge, dirt/debris and oily materials that have accumulated on floors and walls inside the former mill building. This plan addresses cleanup of sludge, dirt/debris, and oily materials containing PCBs inside the building.

### Phase II – Building Interior Porous Surfaces

Following removal of the interior sludge, dirt/debris and oily materials, sampling and testing of porous concrete and wood surfaces will be undertaken to determine additional mitigation requirements. Many of these surfaces are covered with a layer of sludge, dirt/debris or oily materials, thus it is proposed that the sludge, dirt/debris and oily materials are removed and properly disposed prior to sampling of the underlying porous surface. This approach will allow improved visual identification of stained surfaces and permit more representative sampling of the porous material for PCB impacts. A separate plan will be presented that details the supplemental testing and methodology for mitigation of interior porous surfaces.

### Phase III – Soils

Preliminary testing has identified PCBs in soils both exterior to and beneath the site building. Due to restricted access, additional sampling and testing of soils will be undertaken following partial demolition of the Site Building. A separate plan will be presented that details the supplemental testing and methodology for mitigation of site soils.

The remediation work proposed in this Plan is being undertaken by Village at Little Falls, LLC in order to initiate Site redevelopment activities which include demolition of the former mill building. To facilitate the remediation of this facility, Ransom and Village at Little Falls, LLC respectfully request that this Plan be reviewed and approved by the EPA by May 28, 2006 (30 days from submittal).

The Maine Department of Environmental Protection (MEDEP) has reviewed and approved a Voluntary Response Action Plan (VRAP) dated June 8, 2005, and has issued a "No Action Assurance Letter" to Village at Little Falls, LLC and Lumas, Inc. (site owner). The VRAP details the Site background, Site investigation findings and the proposed mitigation plan. MEDEP will issue a "Certificate of Closure" following completion of Site mitigation and review of associated documentation.

## **2.0 BACKGROUND**

### **2.1 Site Description**

The Site consists of a former steel mill located on 7 Depot Road in South Windham, Maine (refer to Figure 1). The approximately 6.5 acre parcel is bordered by Depot Street to the North, Maine Central Railroad tracks to the east, the Presumpscot River to the South and Route 202 to the West. The site was reportedly first developed for industrial use in the 1700s, and over the years uses included a saw mill, grist mill, manufactured wood board mill and the steel mill whose remnants presently occupy the site.

The site is presently occupied by a former mill building constructed primarily of concrete and brick. The majority of the building consists of two levels, including a ground floor/basement that is partially below grade. Structures were added to the building over the years, and historic site plans denote the following uses: boiler house, generator room, press building, melt building, storage and manufacturing, and offices. The forge shop and boiler house have been razed.

### **2.2 Summary of Previous Investigation Activities**

The property has been the focus of several environmental investigations since 1995. The investigation reports reviewed by Ransom include the following:

1. Phase I Limited Environmental Assessment, Lot 7 of Map 38, Windham Township, South Windham, Cumberland County, Maine, by Consla Geotechnical Engineering, March 18, 1993.
2. Environmental Site Assessment, Phase I & II, Former Steel Mill Property, Route 202 and Depot Street, Windham, Maine, by S.W. Cole Engineering, Inc., November 17, 1997.
3. Report on Supplemental Site Investigation, 7 Depot Street, Windham, Maine by Jacques Whitford Company, Inc., March 9, 2004.

The Phase I Limited Environmental Assessment by Consla Geotechnical Engineering identified potential sources of environmental impacts but included no subsurface investigation or chemical testing of soils, sludge or other materials at the Site. The assessment identified numerous tanks, chemical storage containers and operations areas that had the potential to impact the site environment.

Subsurface investigations by S. W. Cole in 1995 and 1996 included completion of twenty-four test pits targeting former storage tanks and other areas of potential concern. Soil samples were screened for volatile organic compounds (VOCs) with a photoionization detector (PID) and six soil samples were tested in a laboratory either for fuel oil, pesticides, PCBs, or heavy metals.

S. W. Cole identified heavy oil-impacted soil at the northern end of the site near Depot Street. The impacted soil was located in the vicinity of a two former above-ground heavy oil storage tanks (now removed). S. W. Cole removed approximately 11 tons of soil impacted by the heavy oil under the oversight of the MEDEP. S. W. Cole identified no significant impacts from pesticides, PCBs or heavy metals during their Site investigation.

In August, 2003, Jacques Whitford completed supplemental investigations including twelve test pits, six hand augers and twenty-three surface soil samples at the 7 Depot Street site to evaluate areas of potential concern identified during previous site investigations. These areas included:

- Two former above ground fuel storage tanks (15,000 and 10,000 gallon capacity) near the railroad tracks on the east side of the site where oil-stained soils were observed during a previous site investigation;
- Two 1,000 gallon underground wastewater tanks adjacent to the north wall of the facility;
- Former 3,000 gallon above-ground fuel tank located at the end of a rail spur on the east side of the site;
- Transformer pad/electrical substation on the south side of the site;
- Former drum storage area at the south end of the former mill building;
- Former garage at the south end of the site; and
- A sump and area of broken concrete in the basement of the former Melt Building.

Selected soil samples were tested for VOCs (EPA Method 8260-B), diesel-range organics (DRO), the eight RCRA metals, and PCBs. Sampling by Jacques Whitford also included testing of sludge and dirt/debris from floor surfaces inside the mill building for PCBs. The interior PCB sample locations Sampled by Jacques Whitford are shown on Figures 2 and 3, and included:

Sample ID	Location/Rationale
SS5	Material from area of broken concrete in Melt Building Basement
SS6	Material from floor sump in Melt Building Basement
SS7	Sludge on concrete floor in maintenance shop, first floor
SS8/SS9	Sludge on concrete floor in maintenance shop, first floor
SS10	Sludge on concrete floor near former transformer, first floor
SS101A/B	Material from floor sump in Melt Building Basement
SS102	Dirt/debris pile on concrete floor in Melt Building Basement
SS103	Dirt/debris pile on concrete floor in Melt Building Basement
SS104	Dirt/debris pile on concrete floor in Melt Building Basement

Jacques Whitford collected sample SS5 from an area of broken concrete in the basement of the former Melt Building. Samples SS6 and SS101 were collected from a floor sump along the south wall in the Melt Building. The sump was about 1.5 ft x 1.5 ft square and contained water at a depth of about 2 ft below the floor level. Hand excavation along the building wall did not identify a discharge pipe from the drain. Jacques Whitford indicated that the drain may have an open bottom or sides under the building floor, with no point discharge.

Samples SS7, SS8/SS9 (co-located samples), SS10, SS102, SS103, and SS104 were composed of sludge that had accumulated on the building's concrete floor. Sample locations were selected based on proximity to oil stains, maintenance activities and former electrical equipment, such as transformers.

Total PCBs concentrations of 174 ppm (Aroclor 1254 and Aroclor 1260) were detected in material collected from the floor sump located along the south wall of the building basement/ground floor (SS6). Confirmatory sampling from this location indicated 262 ppm PCBs (SS101A) and 570 ppm PCBs (SS101B – split sample). The area of broken concrete (SS5) contained 77 mg/kg total PCBs.

Material sampled from the surface of the concrete floor inside the building contained total PCBs ranging from 11 ppm in the maintenance shop (SS8) to 138 ppm on the ground floor of the Melt Building (SS103). The PCBs detected included Aroclor 1254 and 1260.

### 2.3 Surrounding Receptors

Public water is available to the site area. However, Portland Water District records for South Windham indicate that a number of residences generally east of the site have private water supply wells. The closest wells to the site include the Boulanger, Georgatos and Reed residences, located about 500 to 1,000 feet to the northeast. Site topography indicates these residences are located at an elevation 20 to 40 feet higher than the site and are likely upgradient with respect to groundwater flow.

The Presumpscot River borders the site to the west, and properties to the north, east and south consist of a mix of commercial, industrial and residential properties. The closest residence to the site is an abutting apartment building about 300 feet east of the mill building. Ransom has identified no schools, playgrounds or day care facilities within 500 feet of the Site.

### 3.0 SITE CHARACTERIZATION BY RANSOM

Based on the results of the prior Site investigations, Ransom conducted additional characterization of materials inside the mill building for PCBs. The sampling program included the following:

1. Collection of surface wipe samples to assess possible tracking of PCBs into a first floor hallway and office/storage areas at the south end of the mill building.
2. Collection of bulk samples of solid material from the top of concrete floors in the basement and first floor of the Melt Building, the first floor Storage and Manufacturing area, the Press Building (ground floor) and press pit (ground floor);
3. Collection of bulk samples of oily material from the concrete floor and walls in the basement and first floor of the Melt Building, and from the first floor of the Storage and Manufacturing building;
4. Collection of sub-slab material where concrete had been broken in the vicinity of two transformers (in storage) on the first floor of the mill building; and
5. Collection of wood chips from oil-stained wood in the vicinity of electrical equipment in the basement (Generator Room) and first floor of the Melt Building.

The samples collected during Ransom's investigation were analyzed by Pace Analytical, Inc. (Pace) of Pittsburgh, PA for PCBs by U.S. EPA Method 8082. Bulk samples were extracted using US EPA Method 3540 (Soxhlet Extraction) and the wipe samples were extracted using a modified Method 3550 (sonication). The sample results are summarized on Table 1; laboratory data sheets including QA/QC reports are provided in Appendix B.

#### 3.1 Surface Wipe Samples

Ransom collected three surface wipe samples (IW-01 through IW-03) from concrete floors in a first floor hallway and in the office/laboratory space (second floor) at the south end of the mill building on October 27, 2005. Each sample was collected in accordance with the standard wipe test as defined by §761.123. Wipe sampling locations are depicted on Figures 3 and 4.

PCBs were not detected in wipe samples IW-02 (2<sup>nd</sup> floor office area) and IW-03 (1<sup>st</sup> floor hall). Aroclor 1254 and Aroclor 1260 were detected at a total concentration of 44 µg/100 cm<sup>2</sup> in IW-01 (2<sup>nd</sup> floor stockroom).

#### 3.2 Bulk Solids on Walls and Floors

Ransom collected ten samples of bulk solids from the top of concrete floors in the former mill building on October 27 and November 2, 2005 (refer to Figures 2 and 3). The samples included:

- Melt Building basement (IS-09 and duplicate IS-13)
- First floor of the Melt Building (IS-10, IS-11 and IS-14)
- Ground floor of the Storage and Manufacturing area (IS-06)
- First floor of the Storage and Manufacturing area (IS-01 and IS-02)
- Press Building (IS-07 and IS-08).

Total PCBs were detected at concentrations ranging from non-detect in the Press Building (IS-08) to 320 mg/kg on the first floor of the Storage and Manufacturing area (IS-02). Four of the ten samples contained total PCBs with concentrations greater than 50 mg/kg. The PCBs detected were Aroclor 1248, 1254 and 1260.

### 3.3 Oily Material

Ransom collected six samples of oily material associated with fuel distribution piping in the Melt Building. The piping includes fuel supply and return lines extending from the south end of the Melt Building basement to the Storage and Manufacturing area at the north end of the mill building. The oil samples appeared to consist of a heavy heating oil (No. 6/Bunker C) and included:

- Oil on the wall of the Melt Building basement, near fuel piping (IS-03)
- Oil on the concrete floor beneath a fuel pipe cutoff ((IS-04)
- Oil on the wall of a former furnace in the basement of the Melt Building (IS-15)
- Oil that had leaked from a fuel pipe fitting on the first floor of the Melt Building (IS-16)
- Oil that had leaked from a fuel piping elbow on the first floor of the Melt Building (IS-17)
- Oil that had leaked from a fitting in an apparent fuel pump on the first floor of the Storage and Manufacturing area (IS-18).

Samples IS-03 and IS-04 were collected on October 27, 2005. Samples IS-15 through IS-18 were collected on January 2, 2006. The sample the locations are shown on Figures 2 and 3.

Total PCBs in the oily materials were detected at concentrations ranging from non-detect in IS-18 to 240 mg/kg in IS-15. Two of the six samples of oil materials contained PCBs at concentrations greater than 50 mg/kg. PCB constituents included Aroclor 1242, Aroclor 1248 and Aroclor 1254.

### 3.4 Sub-Slab Sample

Ransom collected one bulk sub-slab sample (IS-05) of fill from an area of broken concrete flooring in the Storage and Manufacturing area on October 27, 2005. The sample location is shown on Figure 2.

The soil sample contained total PCBs at a concentration of 97 mg/kg. The constituents were Aroclor 1254 (66 mg/kg) and Aroclor 1260 (31 mg/kg).

### 3.5 Bulk Wood Samples

Ransom collected two samples of oil-stained wood in transformer areas, one from a platform in the former Generator Room (IWD-02), and one from a platform on the first floor of the Melt Building (IWD-01). Sample locations are shown on Figures 2 and 3.

The two wood chip samples contained total PCBs of 36.9 mg/kg (IWD-01) and 105 mg/kg (IWD-02). Aroclor 1242, 1254 and 1260 were identified.

### 3.6 Data Usability/Validation

To assess the usability/validity of the laboratory data obtained during the investigation work described above, Ransom conducted a limited data validation assessment. This assessment included an evaluation of the following parameters as provided in the laboratory reports:

1. Sample integrity;
2. Laboratory information;
3. Chain of custody;
4. Laboratory report details; and
5. Quality Assurance/Quality Control.

During the validation process, Ransom reviewed the laboratory analytical reports and completed a Laboratory Report Checklist documenting the performance of the validation. Ransom did not identify laboratory quality-control issues that may have had an adverse impact on the usability of the data.

### 3.7 Determination of PCB Remediation Waste

The concentration of PCBs in bulk materials sampled inside the mill building to date range from non-detect to 570 mg/kg. Fifteen of the thirty samples collected exhibited total PCB concentrations greater than 50 mg/kg. The source of PCBs at the site is likely a combination of spills and leaks of PCB-MODF from transformers and other electrical equipment, PCB-containing lubricating/hydraulic oils and PCB-contaminated fuel oil. Given uncertainty of the source, date of use and original concentration of PCBs in equipment in the mill building, sludge, dirt/debris and oily material on the floors and walls of the mill building will be presumed to be "PCB Remediation Wastes."

### 3.8 Quantity of PCB Remediation Waste

The quantity of PCB remediation waste has been estimated based on visual assessment of approximate material thickness and square footage of areas covered with sludge, dirt/debris and oily material. The table below summarizes the estimates.

Location	Estimated Impacted Area (sq. ft.)	Estimated Thickness (in)	Estimated Volume (cubic yards)
Maintenance Shop Area	4,200	0.5	6.5
Melt Building- ground	10,000	0.5	15
Melt Building – 1 <sup>st</sup>	10,000	0.5	15
Storage & Manufacturing – ground	6,000	0.25	4.7
Storage & Manufacturing – 1 <sup>st</sup>	6,000	0.25	4.7
Generator Room	400	0.25	0.3
Fuel piping in Melt Building and Storage/Manufacturing Area	Not Applicable	Not Applicable	10
Estimated Total (cubic yards)			56.2

Specific PCB-contaminated locations are not delineated on the site plans due to the virtual ubiquitous presence of these materials within the mill building. As a result, sludge, dirt/debris and oily materials on floors, walls and in fuel piping will be presumed contaminated with PCBs (>1 ppm) and will be removed for proper disposal at a PCB disposal facility.

## 4.0 CLEANUP PLAN

### 4.1 Objective

The objective of the cleanup activities conducted under this Plan is to remove sludge, dirt/debris and oily material from the concrete flooring and walls of the former mill building, and to remove piping that contains heavy fuel oil contaminated with PCBs. Following removal of this material, additional characterization of underlying concrete and soils will be conducted, and self-implementation plans will be submitted to EPA for subsequent mitigation. The mill building is proposed to be demolished for site redevelopment.

### 4.2 Cleanup Goal

It is assumed that sludge, dirt/debris, oily material and associated fuel piping contain PCB concentrations greater than 1 mg/kg. Accordingly, this material will be collected and properly disposed as PCB Remediation Waste.

### 4.3 Public Notification

Ransom will notify the U.S. EPA, MEDEP, and the Windham Town Manager regarding the performance of the work prior to implementation of the Plan.

### 4.4 Necessary Permits

Ransom has submitted a Voluntary Response Action Plan to MEDEP and has received approval for site mitigation. Ransom has identified no other permit requirements.

### 4.5 Sludge, dirt/debris and Oily Material Removal

Ransom will be on-site to oversee contractor removal of sludge, dirt/debris, oily material and associated piping from the mill building. Depending on the consistency of the material, PCB waste will be recovered using either a vacuum equipped with a HEPA-filter, or by shoveling into storage containers (*e.g.*, hardened sludge and oily materials). Dust suppression, such as application of a spray mist, will be implemented on an as-needed basis.

For oil-stained concrete surfaces, the contractor may apply a petroleum-based agent (*e.g.*, #2 fuel oil) to assist in removing residual PCB contamination. Applied liquids and residuals will be contained with plastic sheeting and absorbent pads.

Collected materials will be stored in labeled 55-gallon drums or roll-off containers. The containers will be kept closed except during transfer of waste to the containers. Used HEPA filters and containment materials (*i.e.*, plastic sheeting, tape, lumber) will be managed as PCB Remediation Waste. Following appropriate waste characterization activities, the PCB Remediation Waste is scheduled to be disposed at The Wayne Disposal in Belleville, Michigan.

### 4.6 Confirmatory Sampling and Cleanup Verification

Following the removal of the PCB-contaminated sludge, dirt/debris, oily materials and associated piping from the mill building, Ransom will conduct sampling of the underlying concrete to assess the

potential for residual PCBs. Samples will be collected in visibly stained areas and other locations where PCBs were identified during bulk sample characterization. Sampling will be conducted in accordance with EPA's "draft Standard Operating Procedure for Sampling Concrete in the Field," dated December 1, 1997. Sampling frequency will be assigned based on §761.265, "Sampling Bulk PCB Remediation Waste and Porous Surfaces." If PCBs are identified at concentrations greater than 1 mg/kg, a plan for mitigation of the concrete will be prepared and submitted to EPA.

#### 4.7 Contingencies

The proposed PCB mitigation plan is inherently conservative in that sludge, dirt/debris and oily materials encountered within the mill building is assumed to be PCB Remediation Waste with total PCB concentrations >50 ppm. The greatest uncertainty is the volume of the material that will be collected, stored and disposed off site. Our client and the contractor are prepared to collect and properly dispose of additional PCB Remediation Waste if actual volumes exceed the estimates detailed herein.

## 5.0 PROPOSED IMPLEMENTATION SCHEDULE

Ransom proposes the following implementation schedule for the Plan:

Activity	Completion Date
Submittal of Plan	April 28, 2006
US. EPA Approval (expected)	May 28, 2006
Interior Building Material Removal	June-July 2006

**VOLUNTARY RESPONSE ACTION PLAN  
FOR  
VILLAGE AT LITTLE FALLS, LLC  
SOUTH WINDHAM, MAINE**

**Prepared for:**

**Renee Lewis  
2 Market Street, 6<sup>th</sup> Floor  
Portland, Maine 04101**

**Prepared by:**

**Ransom Environmental Consultants, Inc.  
200 High Street  
Portland, Maine 04101  
(207) 772-2891**

**Project No. 046016  
June 8, 2005**



---

**D. Todd Coffin  
Maine Certified Geologist No. 310**

**VIL\_RESP00913**